

2. SCIAMACHY Daily Report for level 2 products

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2.1 General Info

This report contains a daily analysis on parameters extracted from SCIAMACHY level 2 data (The SCI_OL__2P product).

2.1.1 Report summary

The table below shows general characteristics of the data that are included into this report.

Item	Value
Report version	1.4 (06-11-2007)
Time of report generation	11JUN2008 19:11:27
Data source version	SCIA-OL/3.01-R
Processing scope for products	05NOV2002 00:00:00 to 06NOV2002 00:00:00
Start time of first product within scope	05NOV2002 00:04:16
Stop time of last product within scope	06NOV2002 00:28:08
Total number of level 2 products	15
Number of level 2 products with errors	0

2.1.2 Summary per product

The following table shows a summary for each product used in this report.

#	Product name	Start time	Stop time	Prod err	Fit summary
0	SCI_OL__2PRDPA20021105_000416_000033242011_00002_03563_1603.N1	05NOV2002 00:04:16	05NOV2002 00:59:40	0	GOOD
1	SCI_OL__2PRDPA20021105_014452_000033242011_00003_03564_1537.N1	05NOV2002 01:44:52	05NOV2002 02:40:16	0	GOOD
2	SCI_OL__2PRDPA20021105_032528_000033242011_00004_03565_4973.N1	05NOV2002 03:25:28	05NOV2002 04:20:53	0	GOOD
3	SCI_OL__2PRDPA20021105_050605_000033242011_00005_03566_3327.N1	05NOV2002 05:06:05	05NOV2002 06:01:29	0	GOOD
4	SCI_OL__2PRDPA20021105_064641_000033242011_00006_03567_1587.N1	05NOV2002 06:46:41	05NOV2002 07:42:05	0	GOOD
5	SCI_OL__2PRDPA20021105_082717_000033242011_00007_03568_1474.N1	05NOV2002 08:27:17	05NOV2002 09:22:42	0	GOOD
6	SCI_OL__2PRDPA20021105_100754_000033242011_00008_03569_4981.N1	05NOV2002 10:07:54	05NOV2002 11:03:18	0	GOOD
7	SCI_OL__2PRDPA20021105_114830_000033242011_00009_03570_1573.N1	05NOV2002 11:48:30	05NOV2002 12:43:54	0	GOOD
8	SCI_OL__2PRDPA20021105_132906_000033242011_00010_03571_1476.N1	05NOV2002 13:29:06	05NOV2002 14:24:30	0	GOOD
9	SCI_OL__2PRDPA20021105_150942_000033242011_00011_03572_1481.N1	05NOV2002 15:09:42	05NOV2002 16:05:07	0	GOOD
10	SCI_OL__2PRDPA20021105_165840_000028232011_00012_03573_1570.N1	05NOV2002 16:58:40	05NOV2002 17:45:43	0	GOOD
11	SCI_OL__2PRDPA20021105_183023_000033672011_00013_03574_1619.N1	05NOV2002 18:30:23	05NOV2002 19:26:30	0	GOOD
12	SCI_OL__2PRDPA20021105_201049_000033862011_00014_03575_1514.N1	05NOV2002 20:10:49	05NOV2002 21:07:16	0	GOOD
13	SCI_OL__2PRDPA20021105_215208_000033242011_00015_03576_1616.N1	05NOV2002 21:52:08	05NOV2002 22:47:32	0	GOOD
14	SCI_OL__2PRDPA20021105_233244_000033242011_00016_03577_1610.N1	05NOV2002 23:32:44	06NOV2002 00:28:08	0	GOOD

2.2 Product Quality Indicators

2.2.1 Cloud parameters

This is a new section that shows information about the cloud parameters estimation, in particular cloud fractions and cloud top height. IMPORTANT NOTE: The contents and layout of this section are still being validated. Please use with caution.

General statistics:

Total number of cloud data DSRs: 111900

Total number of cloud data DSRs with good quality flag (=0): 111900 (100.0 %)

Parameter	#valid	Mean	Median	Min	Max	Stddev	Unit
QUALITY_FLAG	111900	0.0000	0.0000	0.0000	0.0000	0.0000	flag
INTEGR_TIME	111900	0.21564	0.25000	0.12500	1.0000	0.079992	s
SURFACE_PRES	111900	0.0000	0.0000	0.0000	0.0000	0.0000	hPa
CL_FRAC	111900	0.43542	0.40462	0.0000	1.0000	0.28598	-

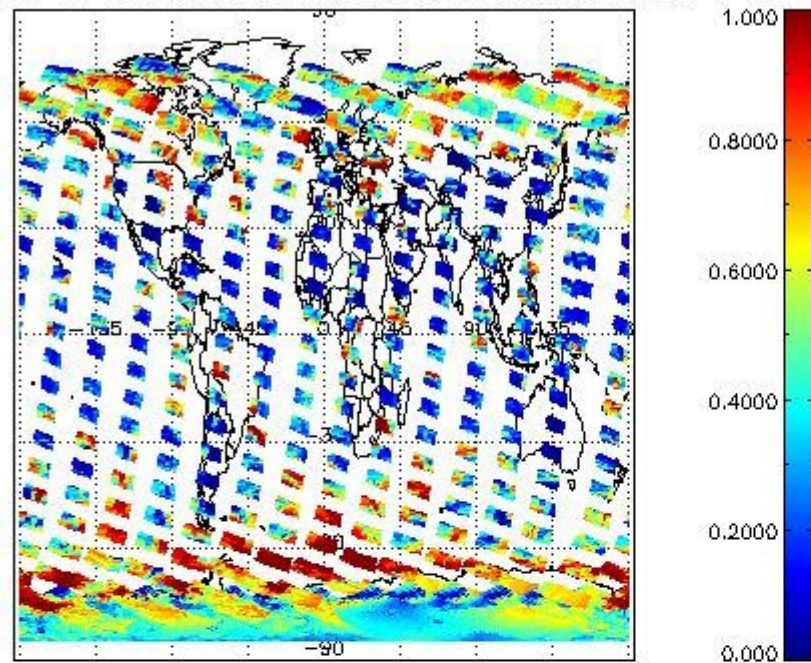
CL_FRAC_ERR	111900	0.0000	0.0000	0.0000	0.0000	0.0000	rel. fraction
PMD_READ	111900	6.9004	8.0000	4.0000	32.000	2.5597	
PMD_READ_CL[0]	111900	0.39737	0.0000	0.0000	25.000	1.4677	-
PMD_READ_CL[1]	111900	0.40852	0.0000	0.0000	25.000	1.4992	-
CL_TOP_HEIGHT	100306	4.2094	2.9568	0.0000	17.000	3.8471	km
CL_TOP_HEIGHT_ERR	0	---	---	---	---	---	---
CL_OPT_DEPTH	100306	46.731	31.386	0.0000	101.00	37.793	km
CL_OPT_DEPTH_ERR	0	---	---	---	---	---	---
CL_TYPE_FLAGS	111900	11100000	11100000	11100000	11100000	0.0000	flags. Bit definition = 0: low or high cloud; 1: ice or water cloud; 2: thick or thin cloud; 3-15: not used
CLOUD_FLAGS	111900	11000110	11000010	11000000	11100000	2607.1	flags
AERO_ABSO_IND	111900	0.50797	0.38950	-4.3479	13.562	1.0634	
AERO_IND_DIAG	111900	0.0000	0.0000	0.0000	0.0000	0.0000	
AERO_FLAGS	111900	01101001	11000000	00000000	11000000	24450.	flags

Time and geolocation plots:

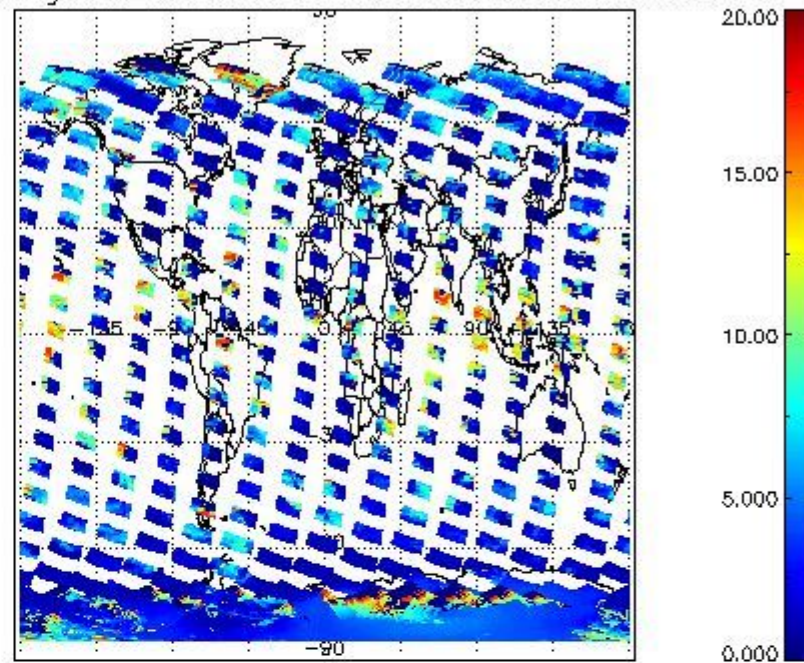
Plots are available for the following parameters:

Number	Data item ID
0	cl_frac
1	cl_top_height
2	cl_opt_depth
3	cloud_flags

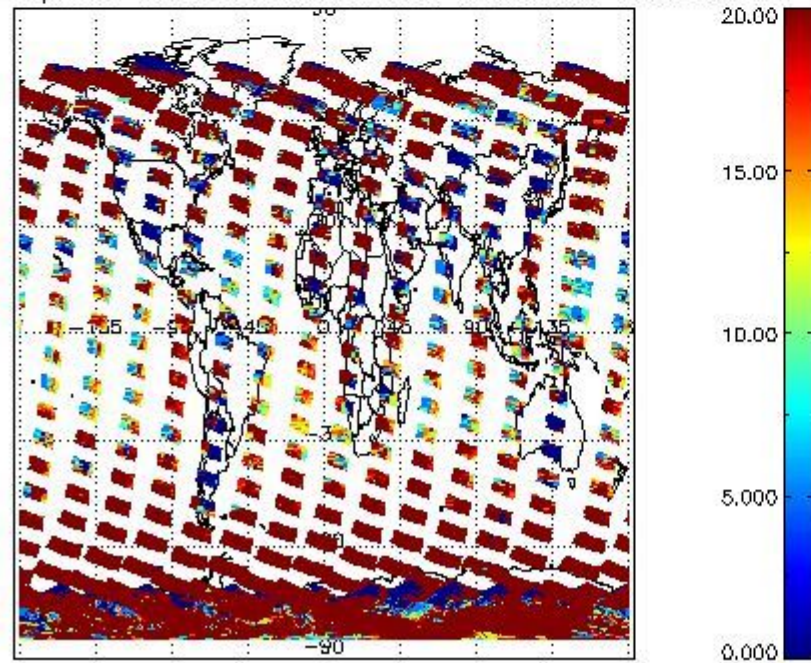
cLfrac for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



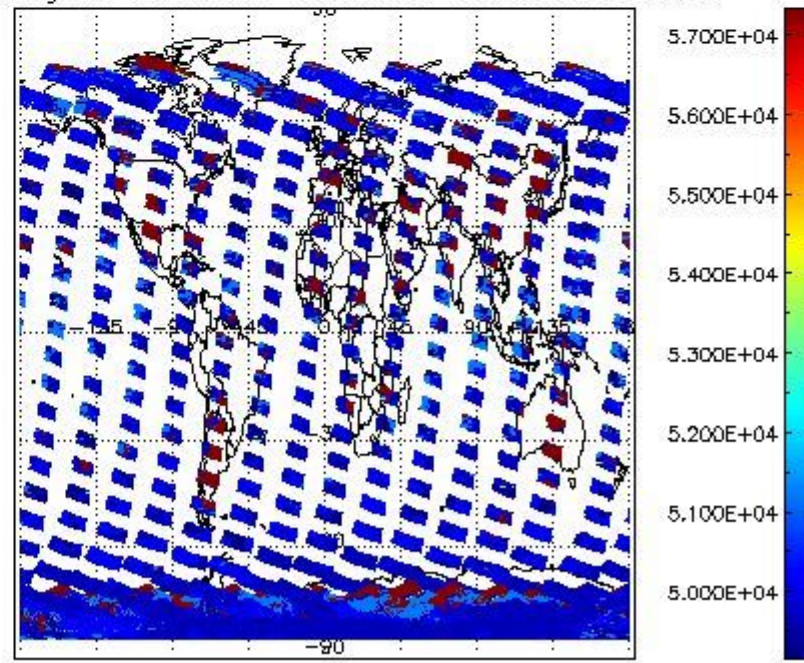
cL_top_height for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



cL_opt_depth for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



cloud_flags for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



2.2.2 Nadir

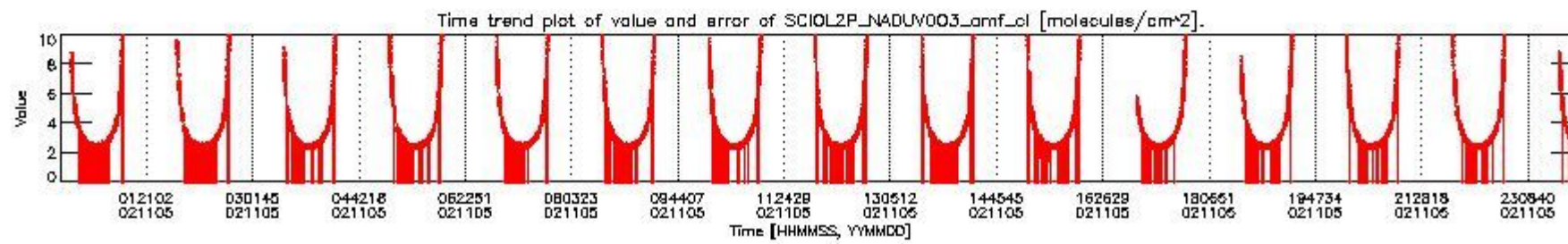
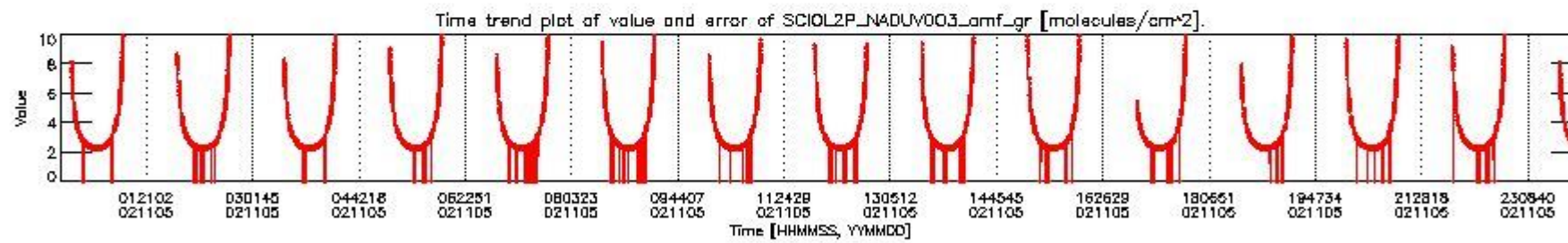
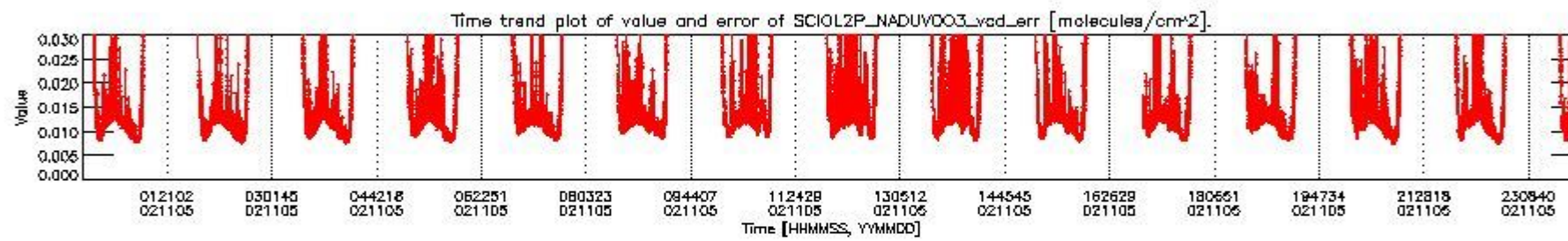
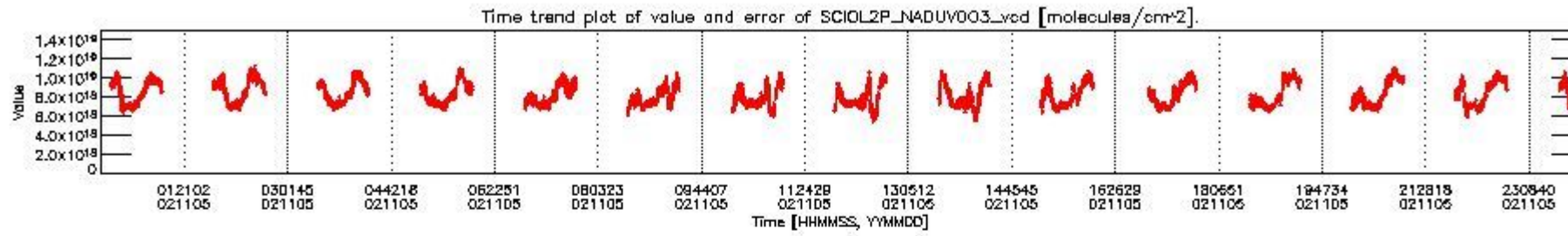
This section shows information about product quality of nadir measurements, in particular the quality of retrieved species.

The following data items are currently included into this section:

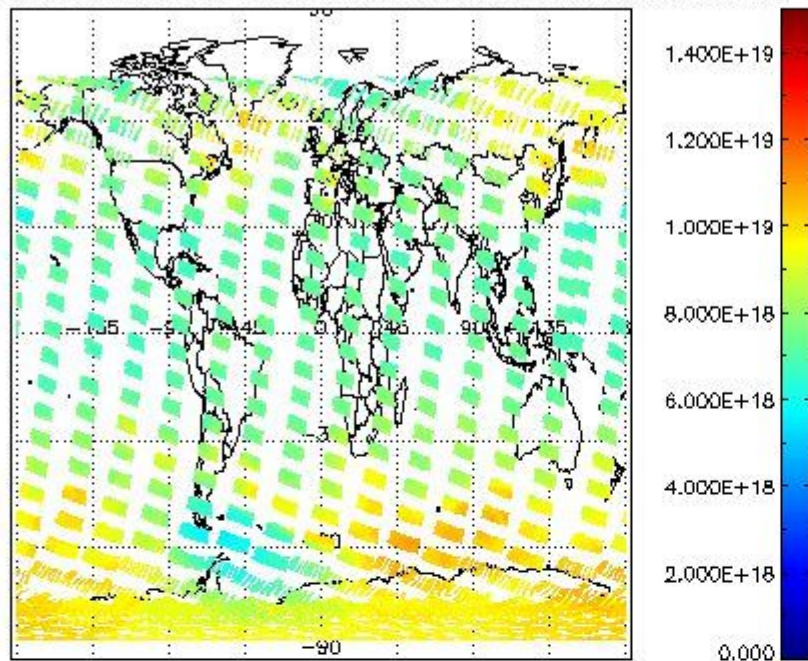
Number	Data item ID
0	SCIOL2P_NADUV003_vcd
1	SCIOL2P_NADUV003_vcd_err
2	SCIOL2P_NADUV003_amf_gr
3	SCIOL2P_NADUV003_amf_cl

4	SCIOL2P_NADUV1NO2_vcd
5	SCIOL2P_NADUV1NO2_vcd_err
6	SCIOL2P_NADUV1NO2_amf_gr
7	SCIOL2P_NADUV1NO2_amf_cl

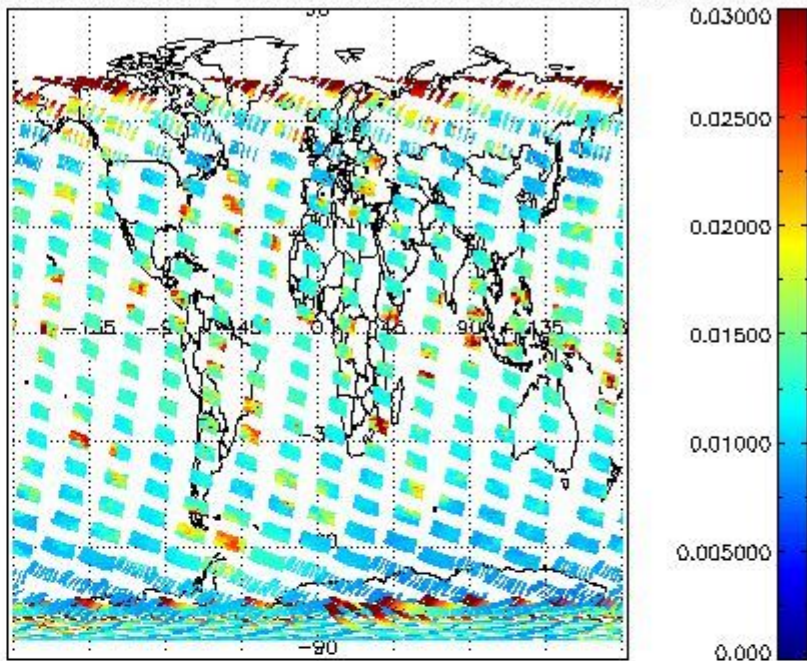
Data is presented both in time trend plots and world map plots, in order to show variations with time and geolocation. The vertical dotted lines in the time trend plots indicate orbits. The orbit times on the X-axis are estimated sensing_start time as suggested by the product sensing_start time in the MPH.



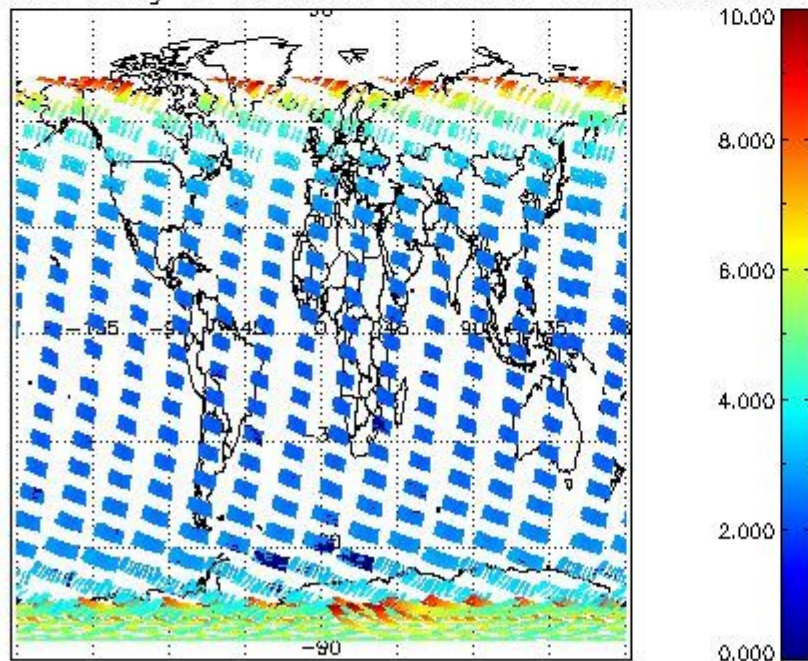
SCIOL2P_NADUV003_vcd for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



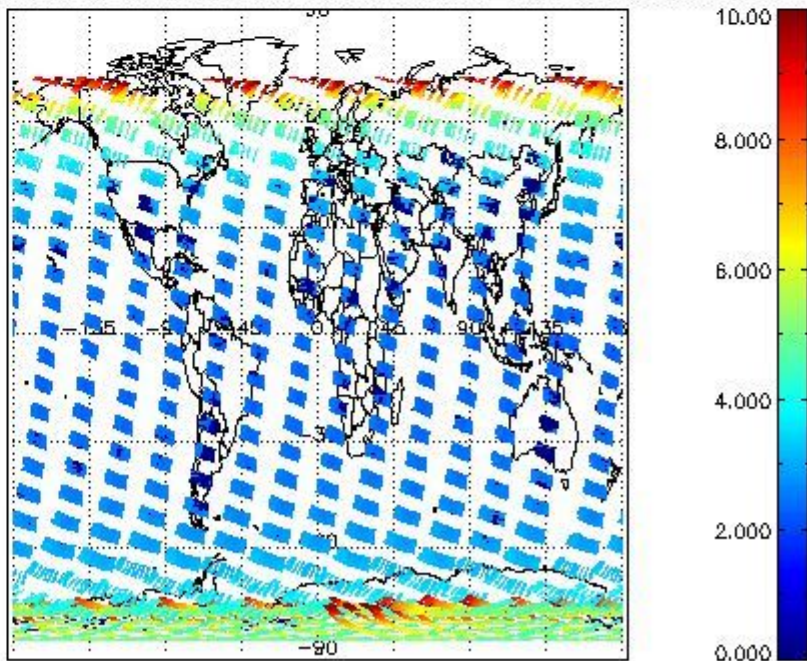
SCIOL2P_NADUV003_vcd_err for 05NOV2002 00:00:00 to 06NOV2002 00:00:00

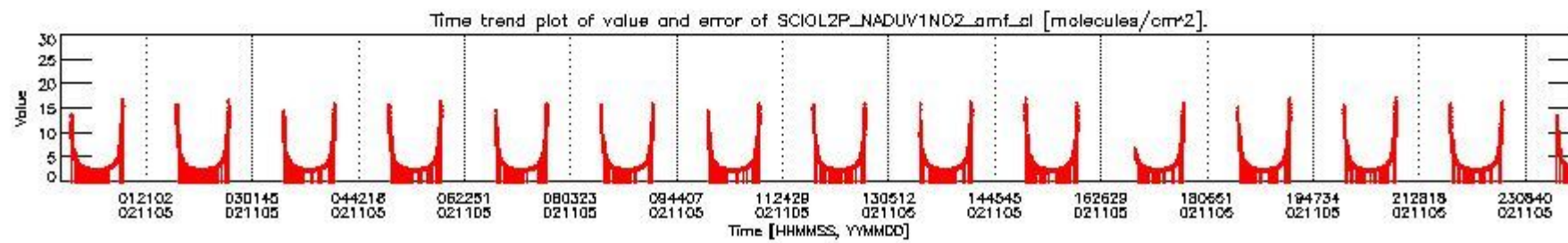
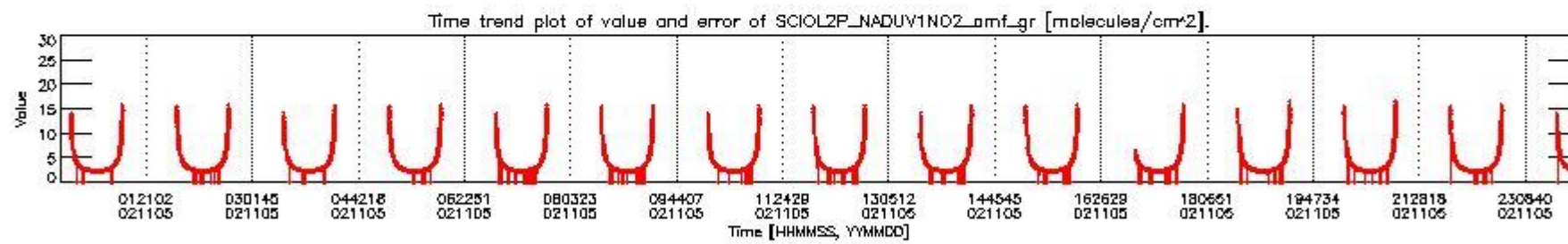
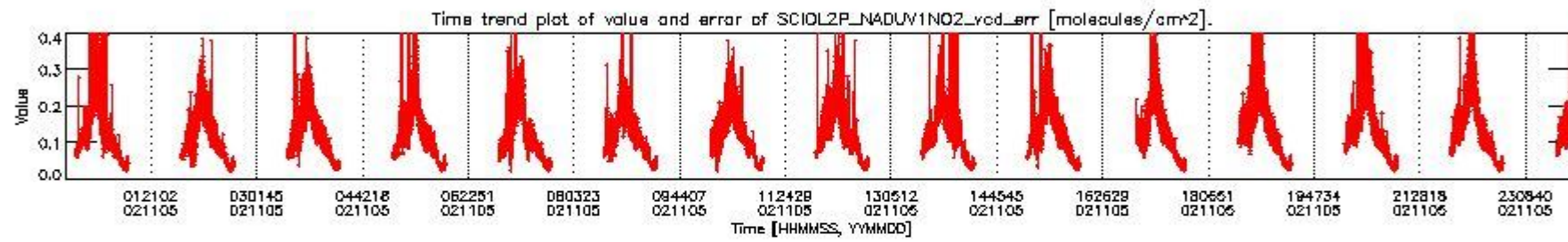
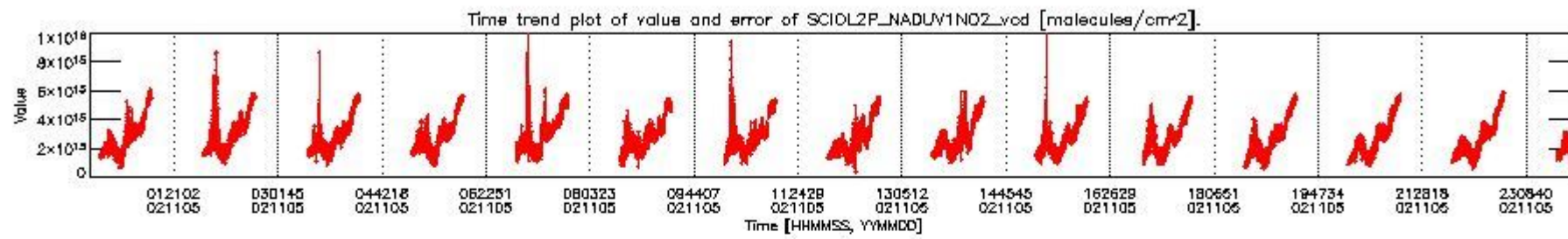


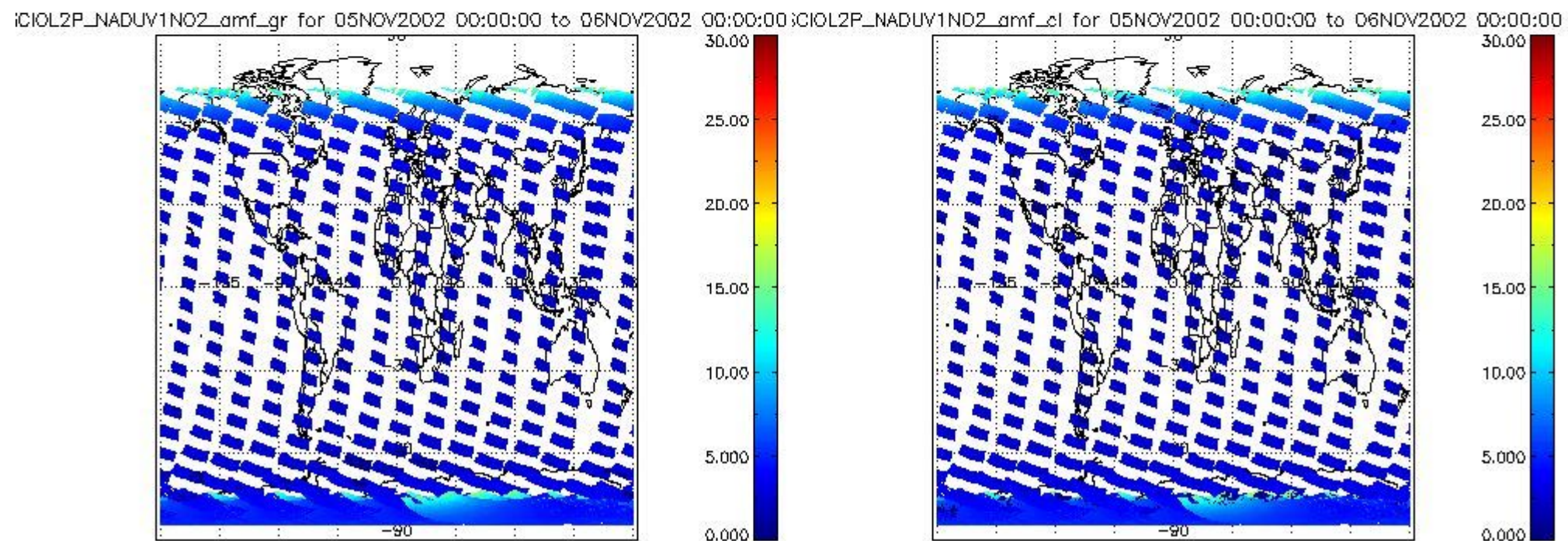
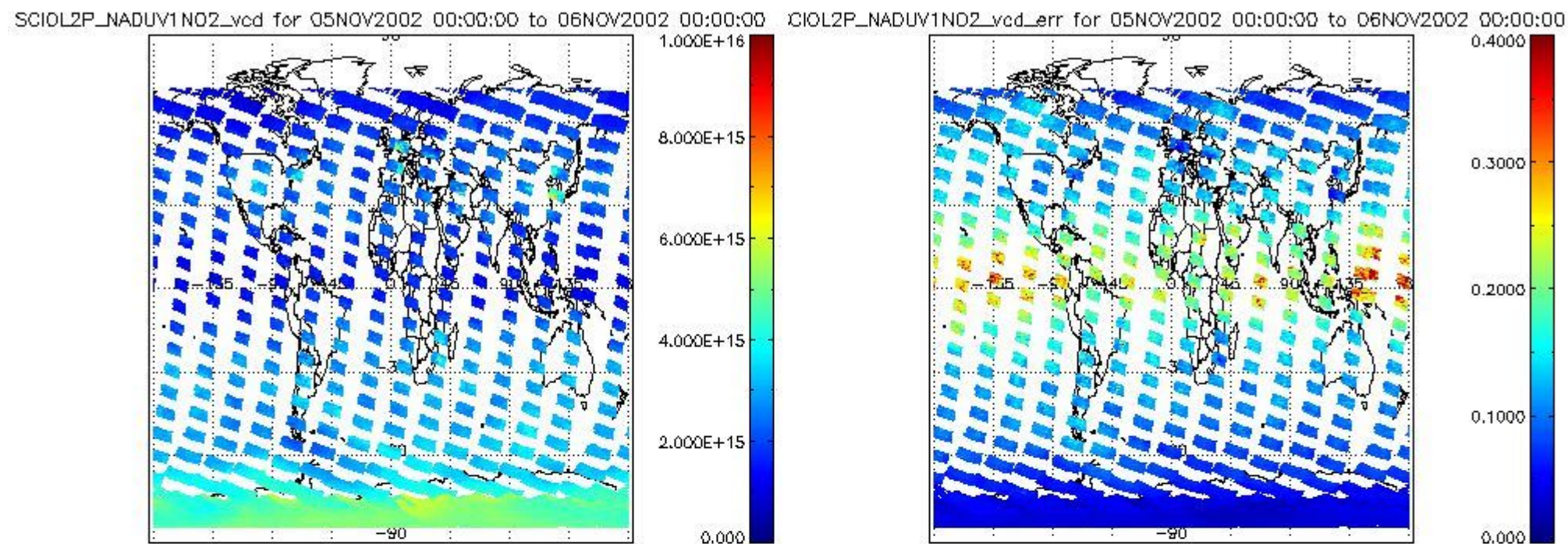
SCIOL2P_NADUV003_amf_gr for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



SCIOL2P_NADUV003_amf_cl for 05NOV2002 00:00:00 to 06NOV2002 00:00:00







2.2.3 Limb

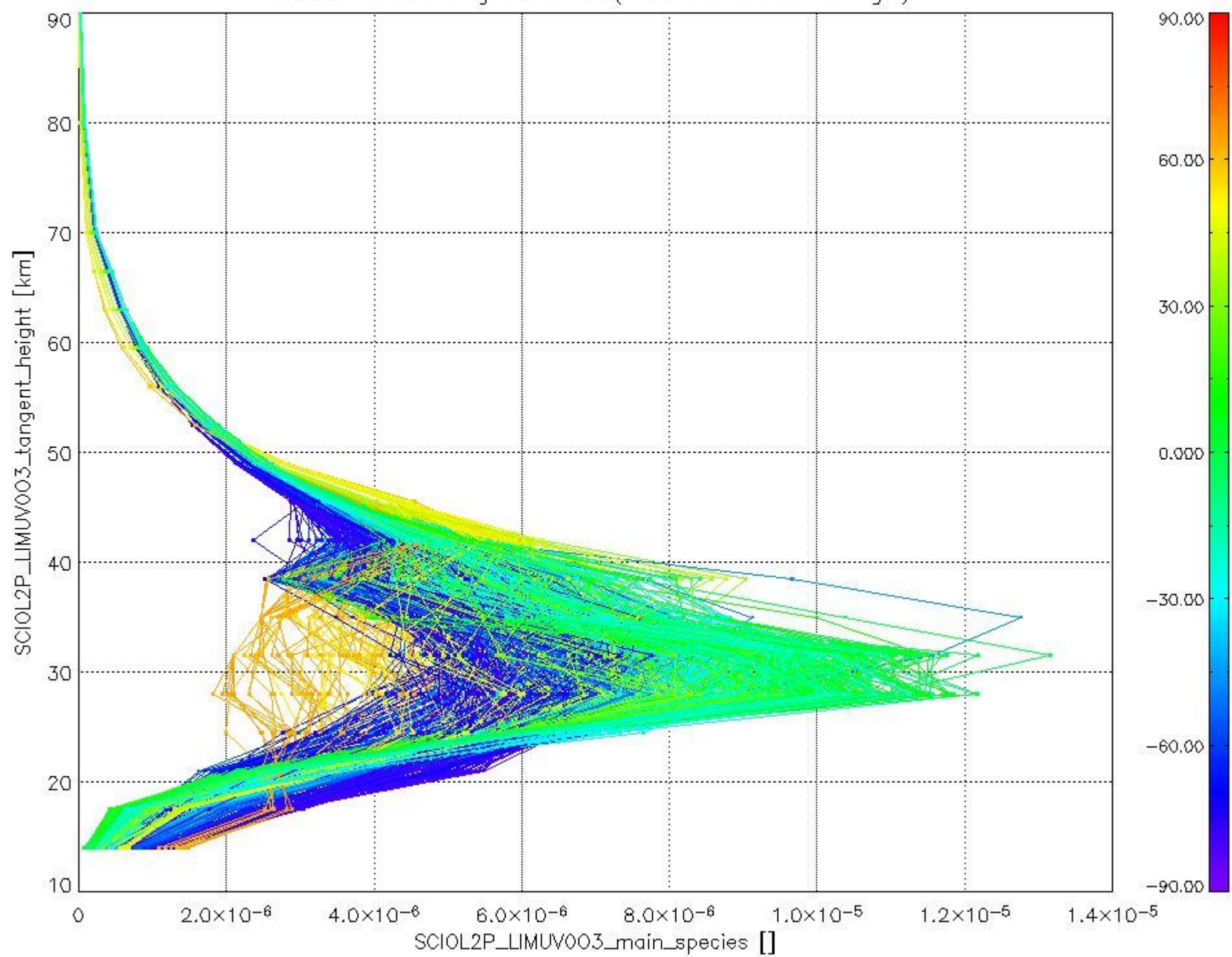
This section shows information about product quality of the limb retrievals, in particular the quality of retrieved species.

The following data items are currently included into this section:

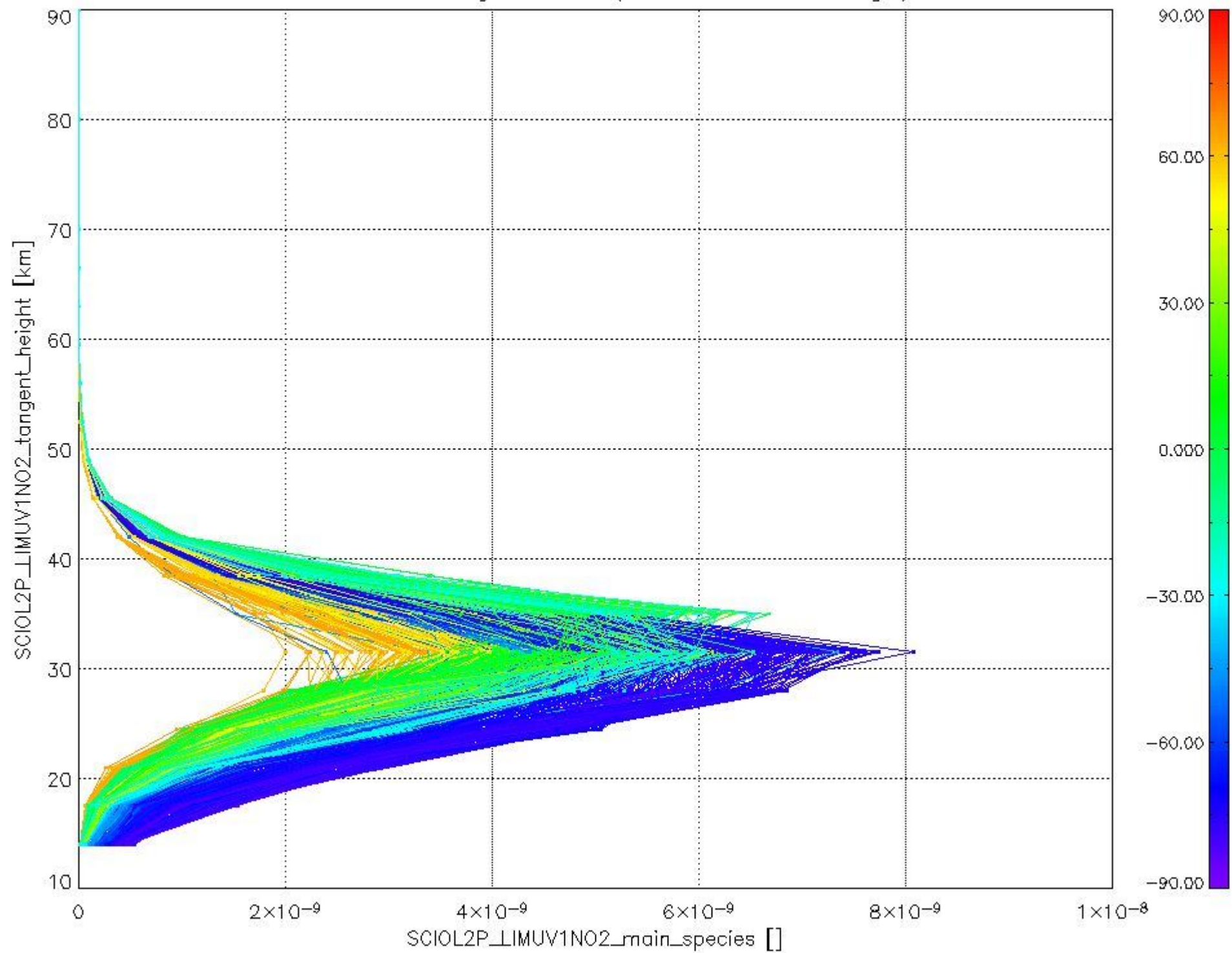
Number	Data item ID
0	SCIOL2PLIMUV003_main_species
1	SCIOL2PLIMUV1NO2_main_species

The following plots shows for each species the tangent volume mixing ratio vs. tangent height. Colours indicate tangent latitude.

Plot of SCIOL2P_LIMUV003_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).



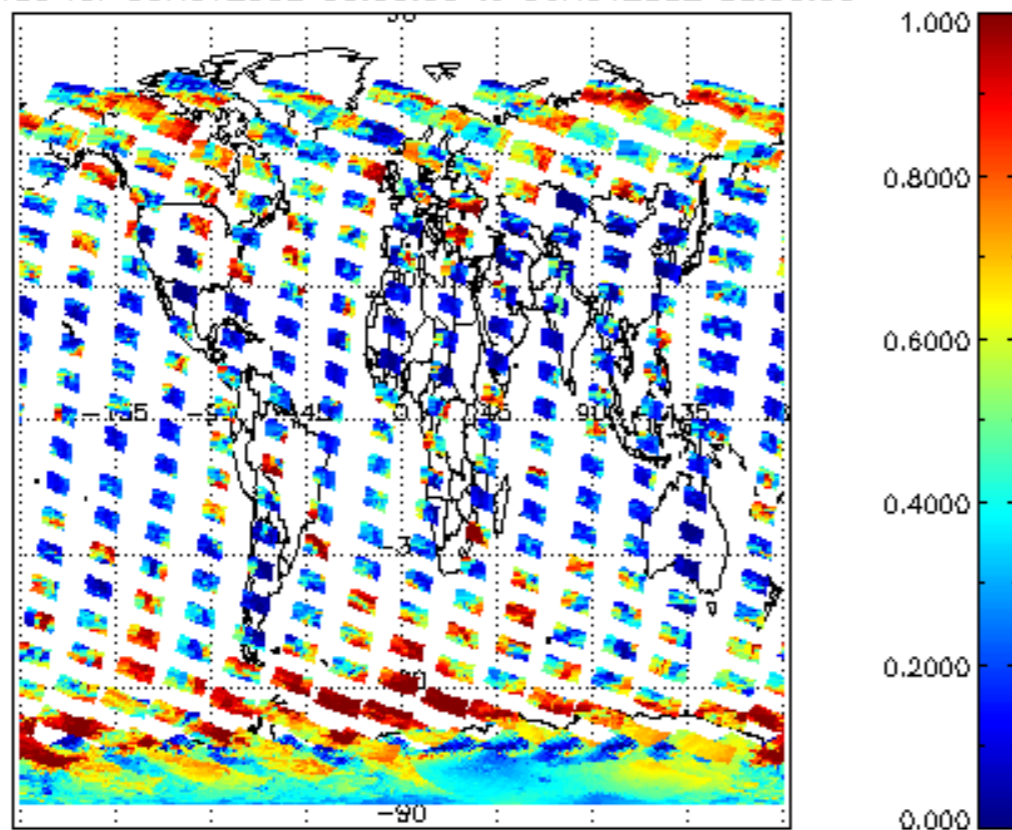
Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
Colours indicate tangent latitude (see colour bar on the right).



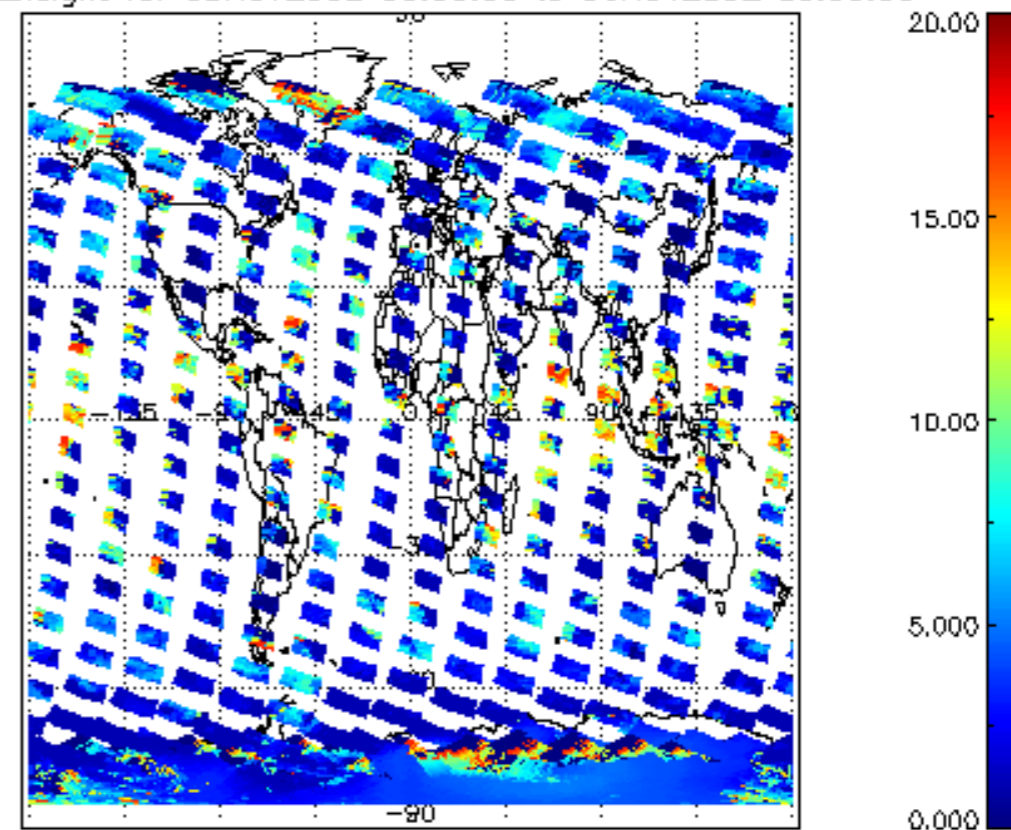
2.3 ADF monitoring

Number	ADP
	IN_ (INITIALISATION_FILE)
0	SCI_IN_AXNPDE20070629_092400_20070720_000000_20991231_235959
	ECF (ECMWF_FILE)
1	NOT USED

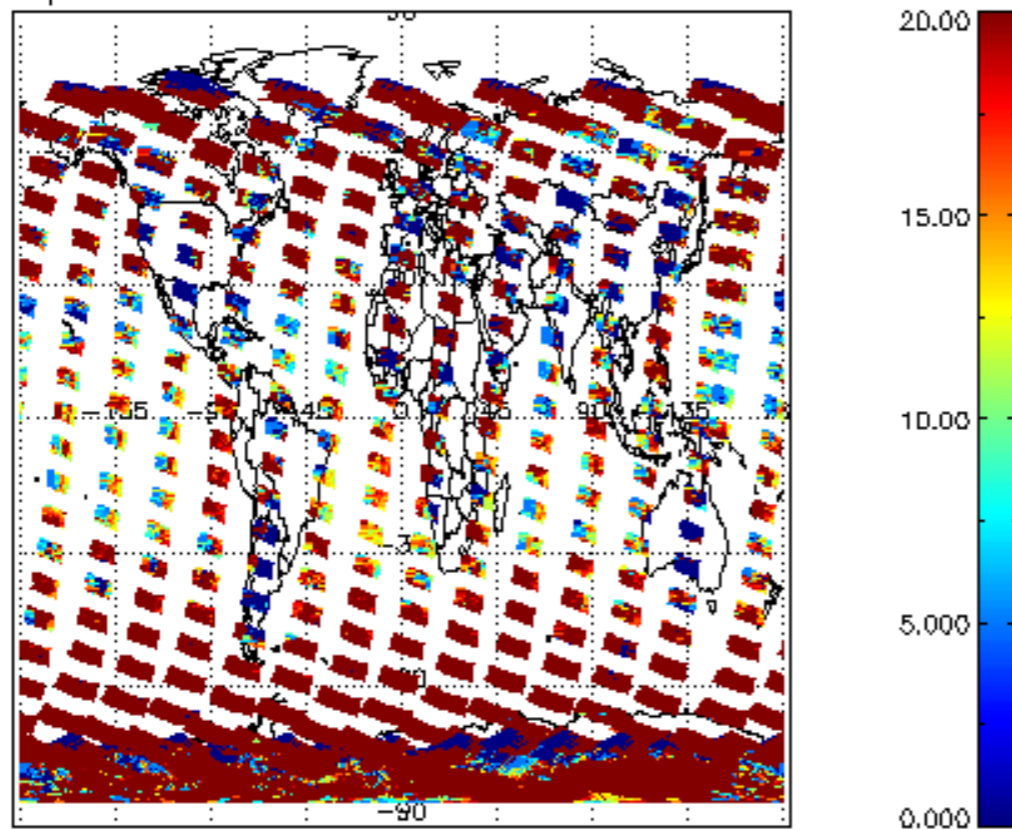
cLfrac for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



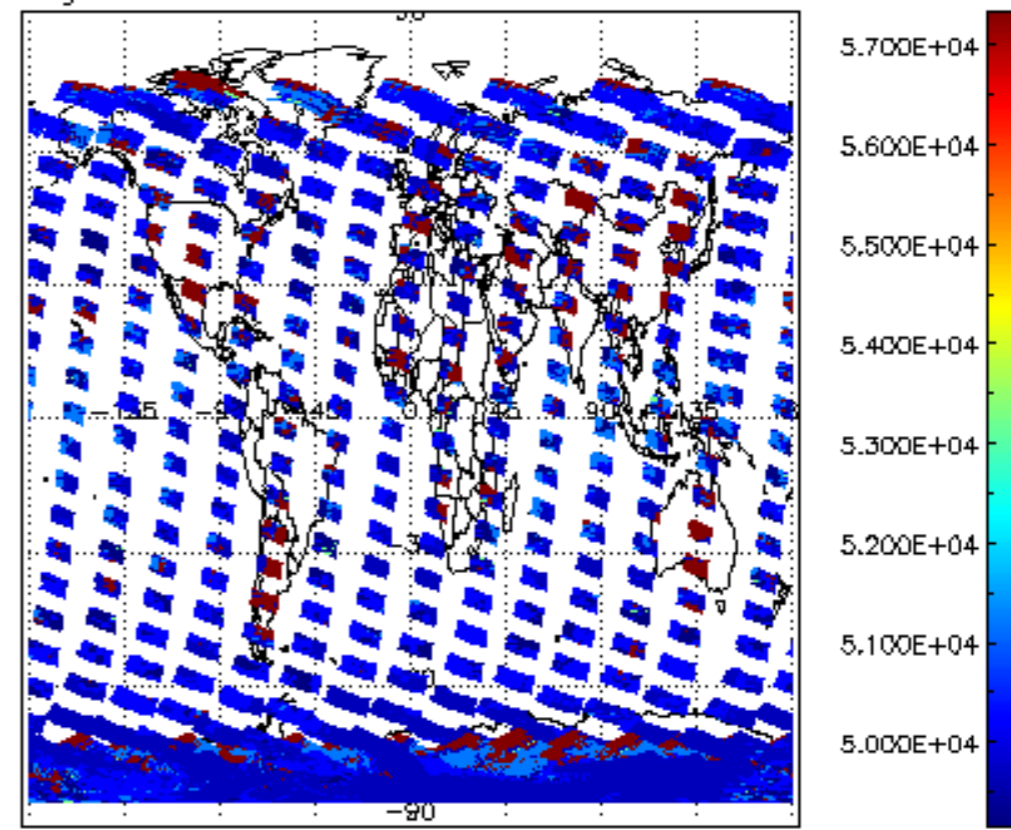
cL_top_height for 05NOV2002 00:00:00 to 06NOV2002 00:00:00

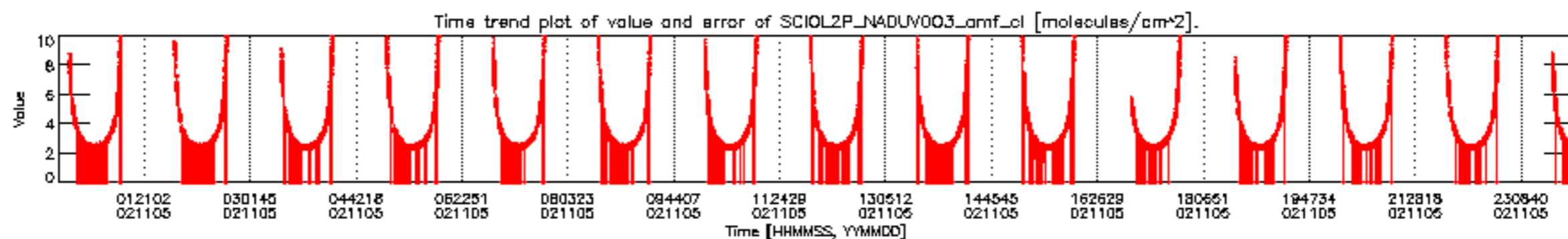
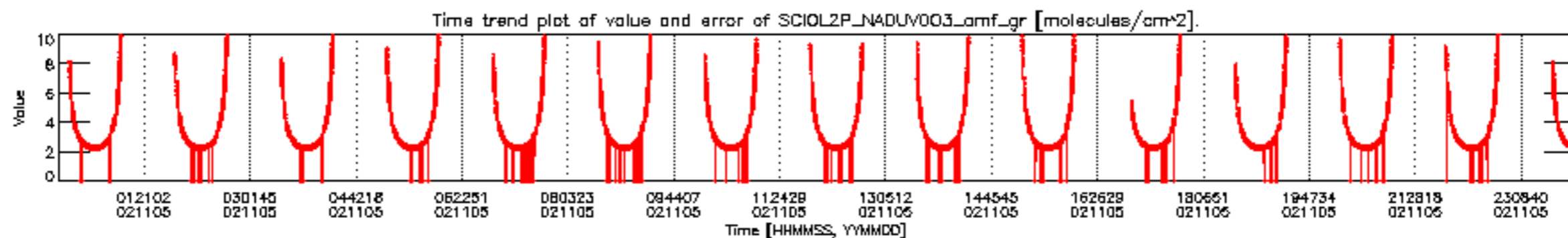
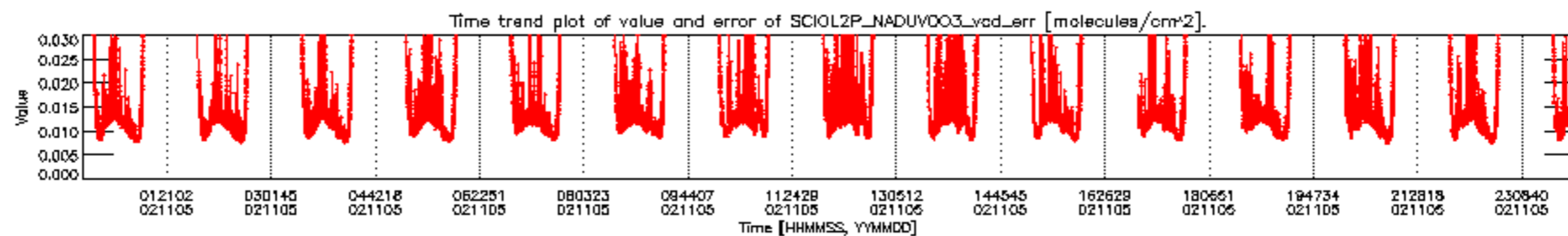
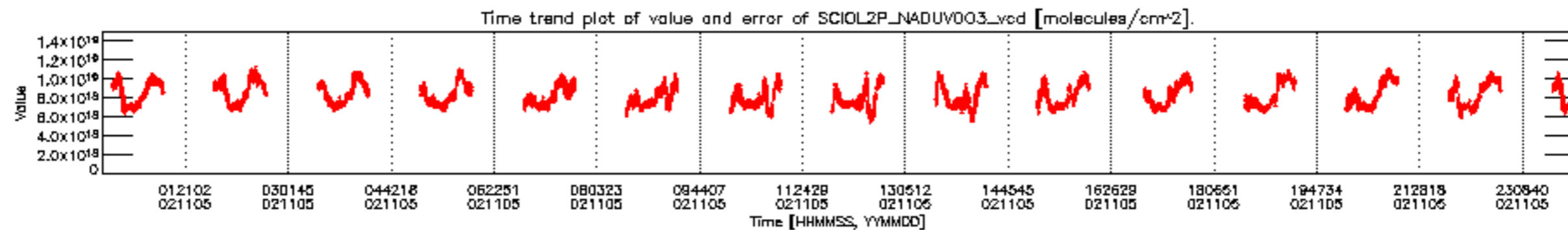


cL_opt_depth for 05NOV2002 00:00:00 to 06NOV2002 00:00:00

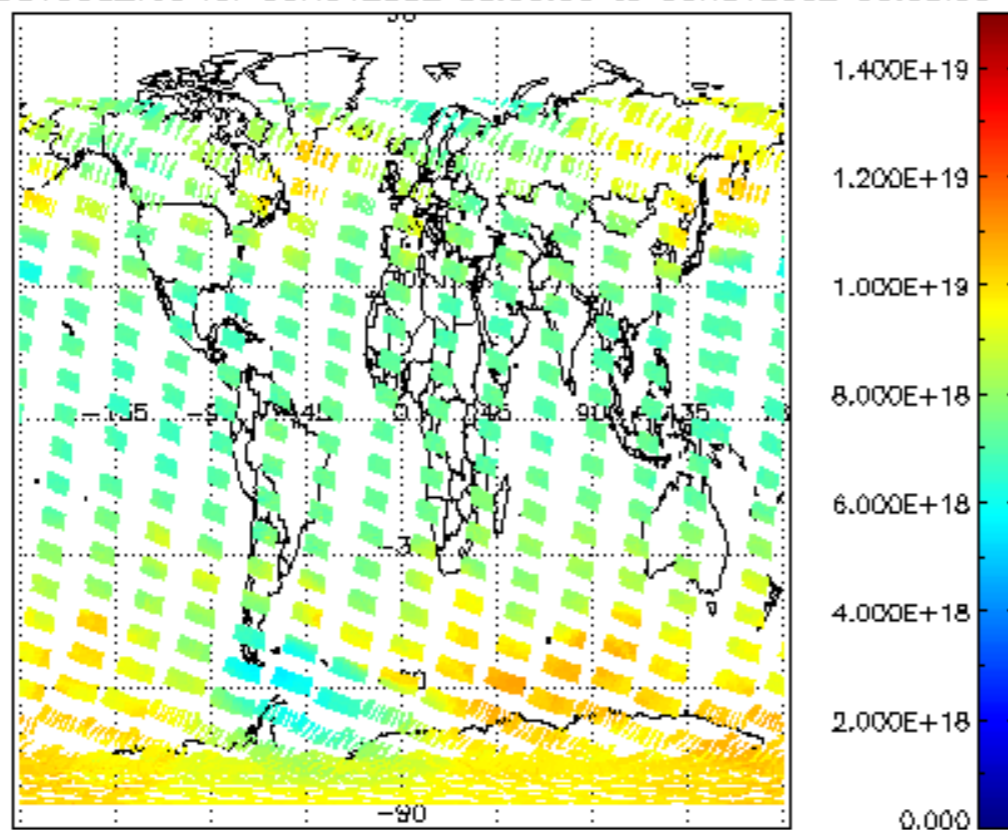


cloud_flags for 05NOV2002 00:00:00 to 06NOV2002 00:00:00

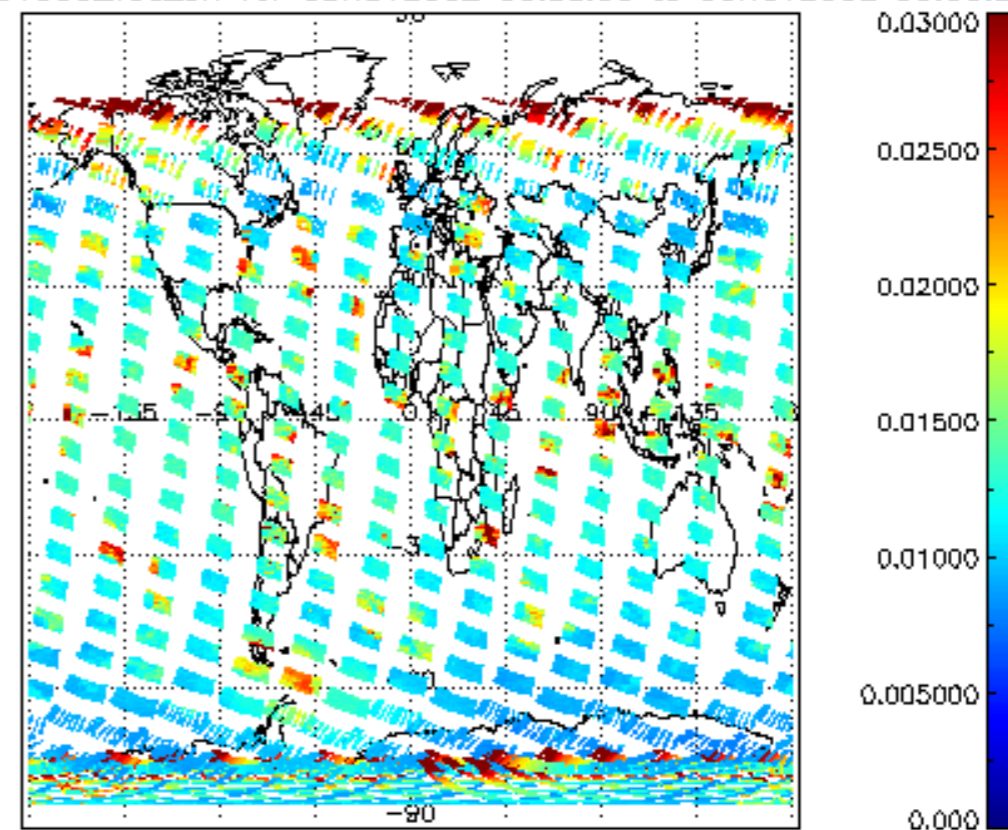




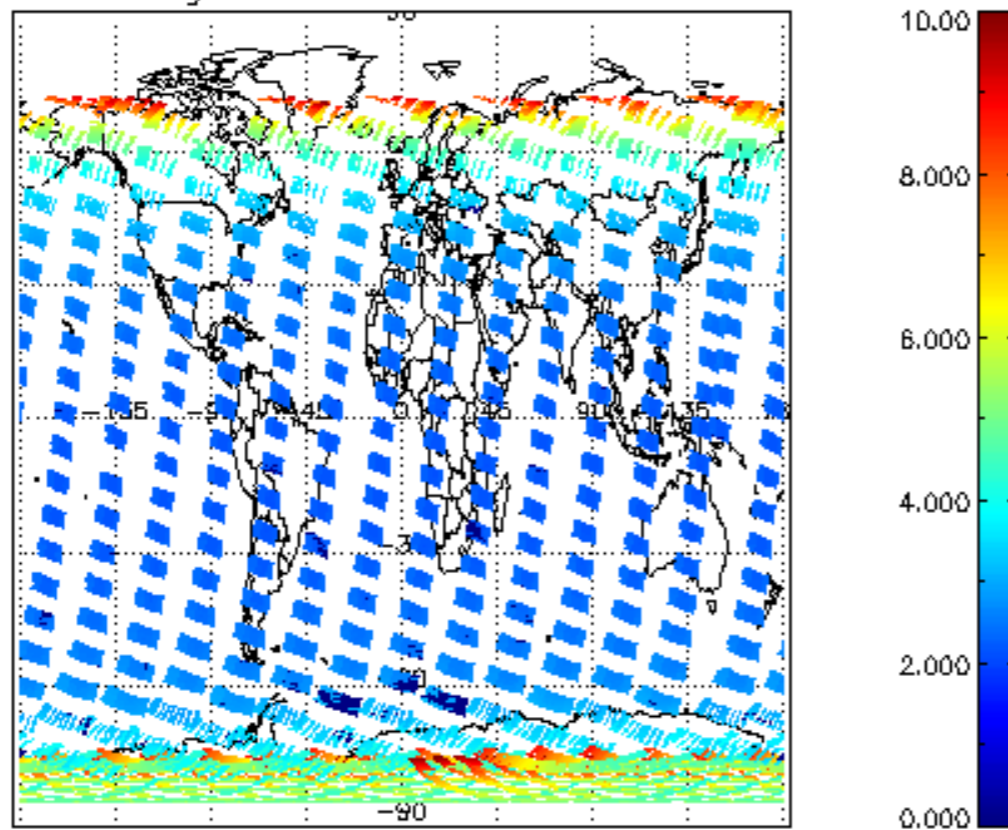
SCIOL2P_NADUV003_vcd for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



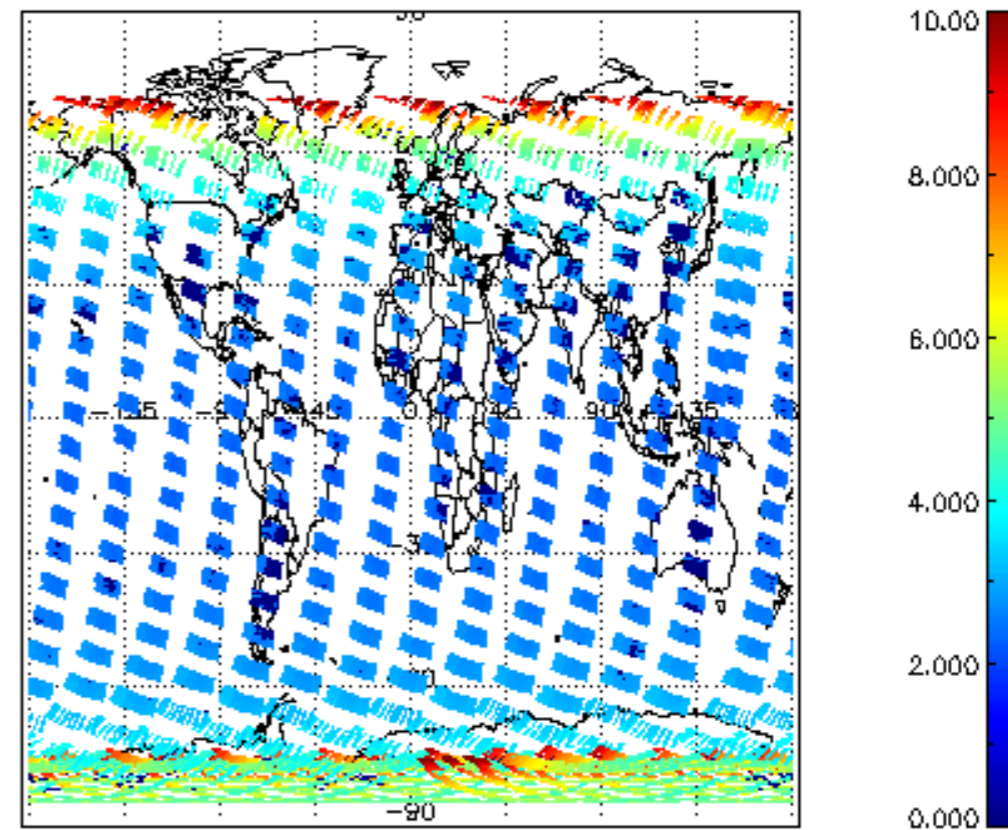
SCIOL2P_NADUV003_vcd_err for 05NOV2002 00:00:00 to 06NOV2002 00:00:00

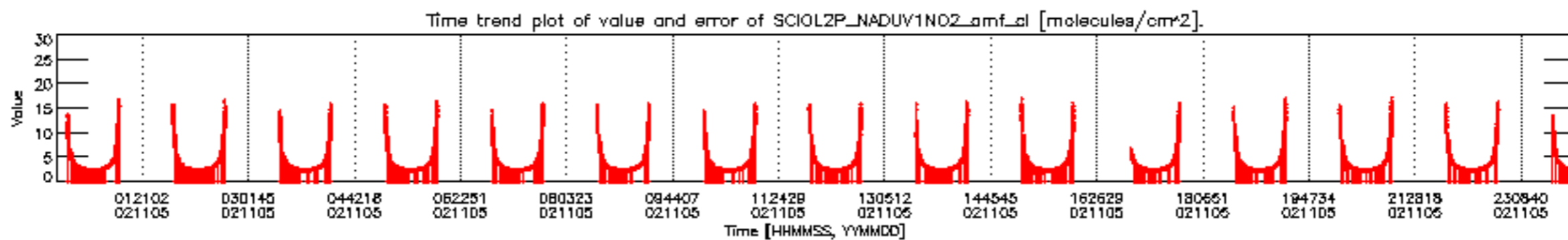
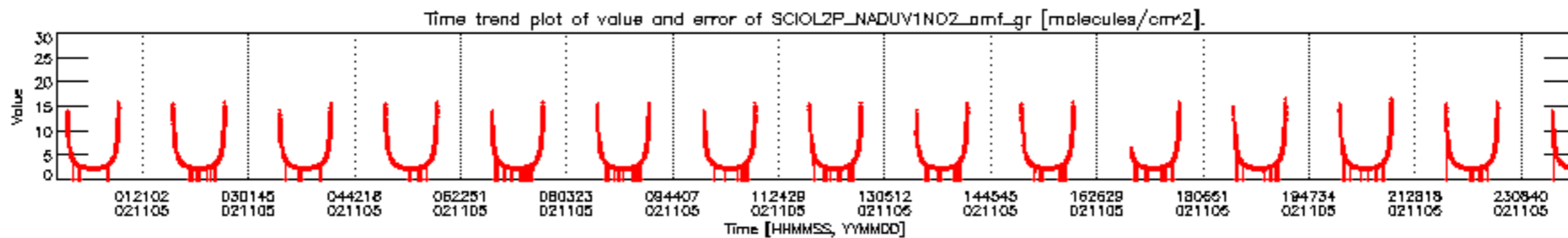
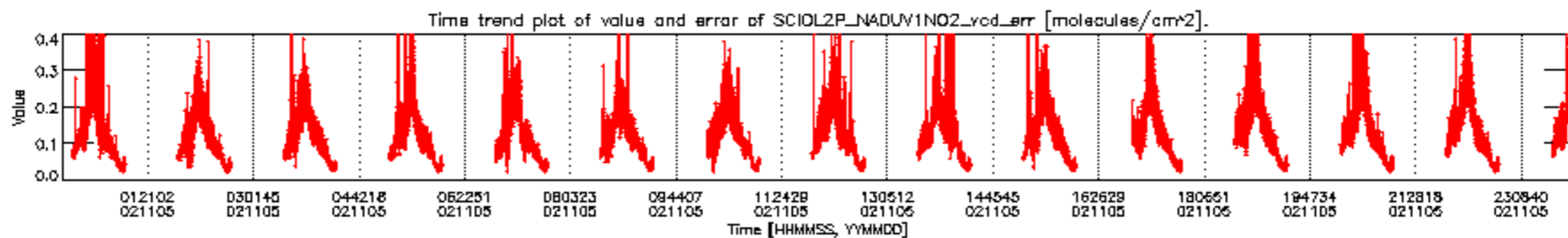
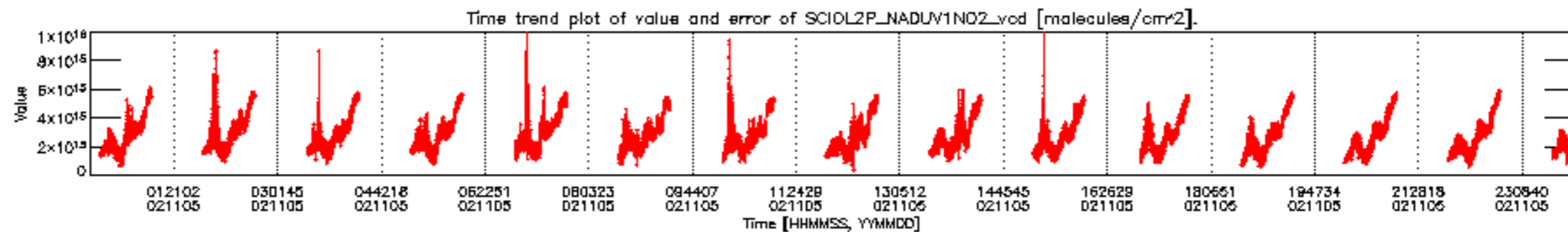


SCIOL2P_NADUV003_amf_gr for 05NOV2002 00:00:00 to 06NOV2002 00:00:00

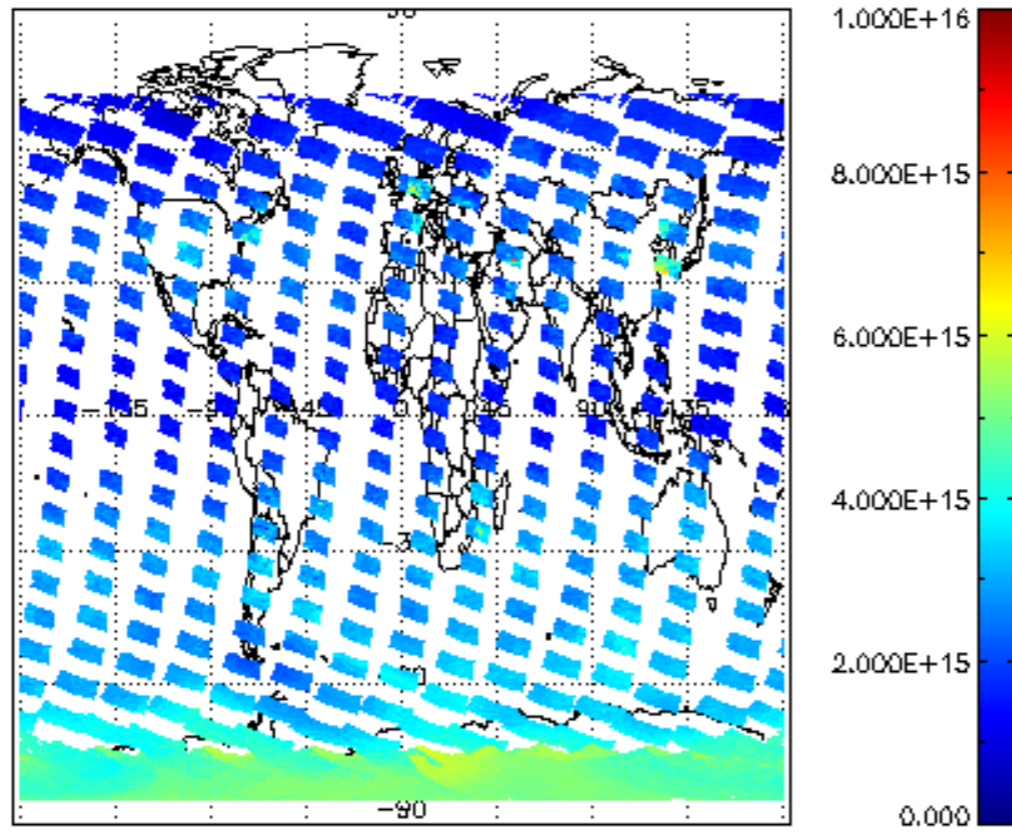


SCIOL2P_NADUV003_amf_cl for 05NOV2002 00:00:00 to 06NOV2002 00:00:00

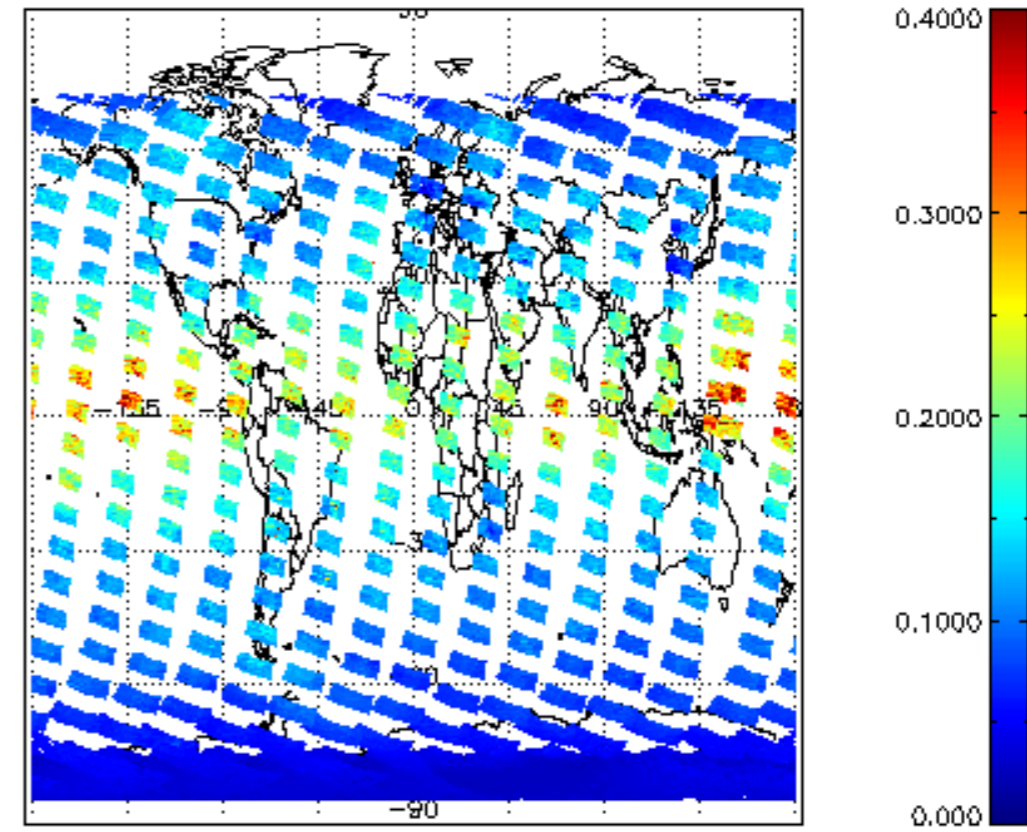




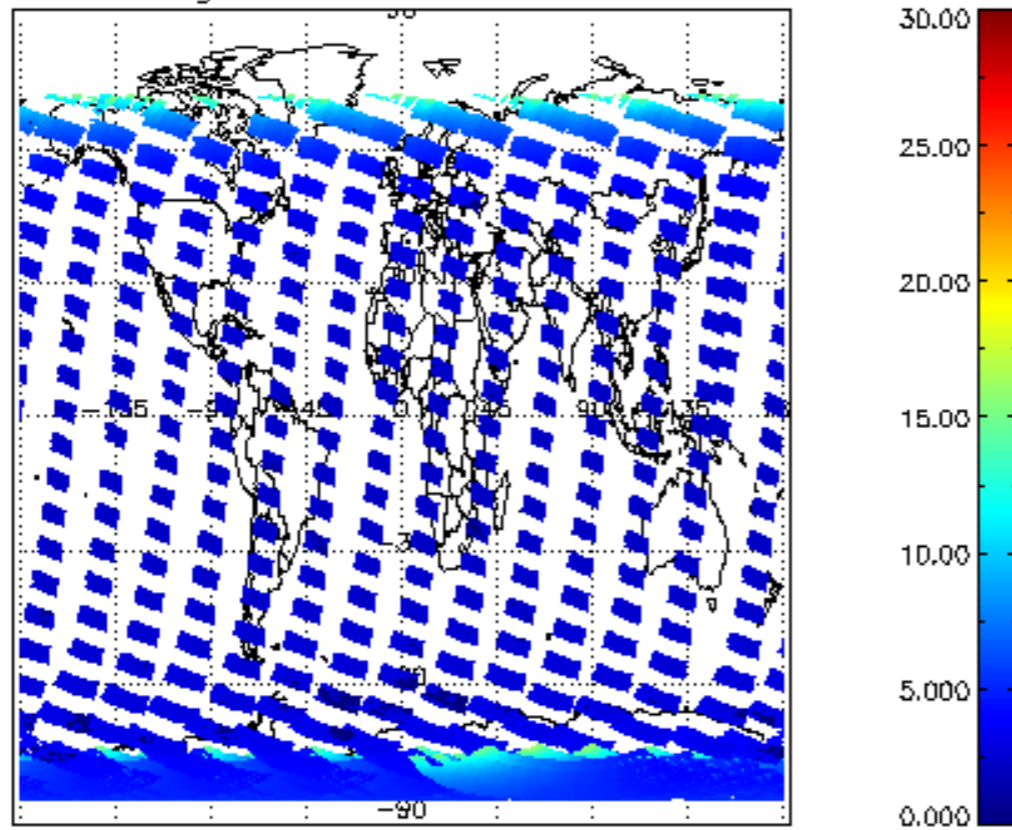
SCIOL2P_NADUV1NO2_vcd for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



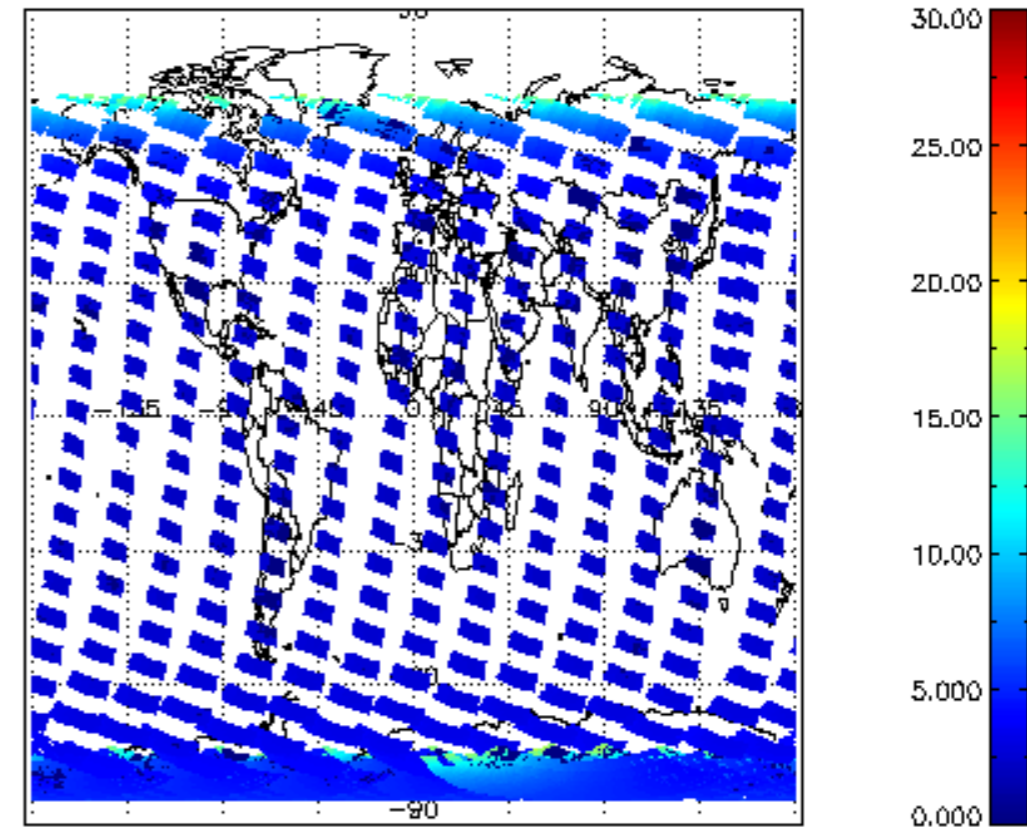
SCIOL2P_NADUV1NO2_vcd_err for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



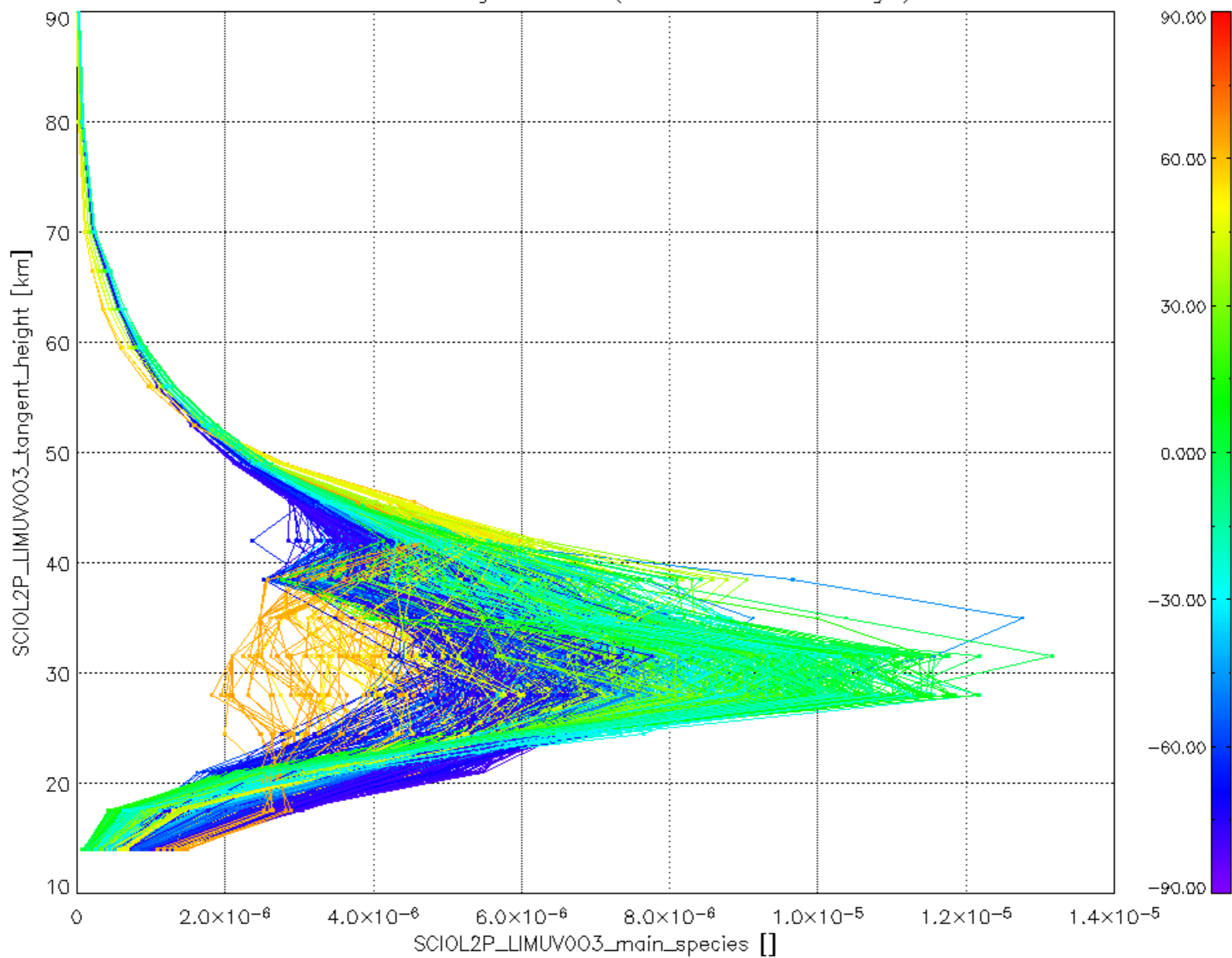
SCIOL2P_NADUV1NO2_amf_gr for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



SCIOL2P_NADUV1NO2_amf_cl for 05NOV2002 00:00:00 to 06NOV2002 00:00:00



Plot of SCIOL2P_LIMUV003_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).



Plot of SCIOL2P_LIMUV1NO2_main_species.tang_vmr vs. tangent height.
 Colours indicate tangent latitude (see colour bar on the right).

